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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,795	11/13/2001	Don Hideyasu Matsubayashi	36.P271	6116
5514	7590	04/12/2006	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			WU, QING YUAN	
30 ROCKEFELLER PLAZA			ART UNIT	
NEW YORK, NY 10112			PAPER NUMBER	

2194

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/986,795

Applicant(s)

MATSUBAYASHI ET AL.

Examiner

Qing-Yuan Wu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 and 46-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 and 46-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/1/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.


WILLIAM THOMSON
CHIEF, INTELLECTUAL PROPERTY EXAMINER

DETAILED ACTION

1. Claims 1-31 and 46-64 are pending in the application.
2. It is noted that claims 1, 14-16, 29-31, 46 and 59-60 may subject to obviousness-type double patenting as being unpatentable over claims 1, 14, 26, 70 and 101 of co-pending Application No. 09/747,097. Correction is recommended.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-14, 16-29, 31, 46-59, 61 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al (hereafter Theimer) (U.S. patent 5,611,050), in view of Bennett (U.S. PG Pub US20020007422A1), further in view of Foote et al (hereafter Foote) (U.S. Patent 6,587,955).
5. Theimer and Bennett were cited in the previous office action.
6. As to claim 1, Theimer teaches the invention substantially as claimed including a method for providing exclusive control of a device's capabilities to a user over a network, the method comprising the steps of:

requesting, by an information processing apparatus, that the device provide the user with exclusive control of the device's capabilities [col. 26, lines 27-33, 44-50; 500, Fig. 18];

determining, by the device, whether the device is available for the user to obtain exclusive control of the device's capabilities [col. 26, lines 50-51; 502, Fig. 18];

in a case where the device determines in the determining step that the device is available for the user to obtain exclusive control of the device's capabilities, providing the user exclusive control of the device's capabilities [col. 26, lines 57-65; 506, 508, 510, Fig. 18].

7. Theimer does not specifically teach in a case where the device determines in the determining step that the device is not available for the user to obtain exclusive control of the device's capabilities, the device adding the user to a reservation queue of users requesting to obtain exclusive control of the device's capabilities. However, Theimer disclosed denying request when the device is not available for the user to obtain exclusive control of the device's capabilities [col. 26, lines 51-53; 504, Fig. 18]. In addition, Bennett teaches queuing and retrieving access request in a wait queue based on priorities and granting exclusive access to the application on the exclusive queue if the exclusive queue (i.e. first position) has an application of higher priority than all applications in the non-exclusive queue [Bennett, pg. 9, paragraph 91; paragraph 92, lines 9-10; pg. 10, paragraph 96, lines 3-7].

8. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined Bennett's request queuing method to Theimer's method of requesting exclusive control because by queuing requests rather than simply denying access

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when a resource is busy reduces network traffics (i.e. denied request causing client to make additional request attempts) and produce a more efficient method of managing requests.

9. Furthermore, Theimer does not specifically teach requesting, by the processing apparatus, that the device process a job using the device's capabilities and adding, by the device the requested job to a job queue of jobs to be processed using the device's capabilities, a job at a first position within the job queue, corresponding to a user other than the user who has been provided exclusive control of the device's capabilities, is deferred from being processed during a period in which the user, who has been provided exclusive control of the device's capabilities, maintains exclusive control of the device's capabilities. However, Theimer disclosed exclusive access to a device's capabilities [col. 26, lines 27-30]. Bennett teaches queuing access requests and retrieving access requests when an application releases a resource from its exclusive use in a wait queue (i.e. deferred request) based on priorities and granting exclusive access to the application on the exclusive queue if the exclusive queue (i.e. first position) has an application of higher priority than any and all application in the non-exclusive queue [Bennett, pg. 9, paragraph 91; paragraph 92, lines 9-10; pg. 10, paragraph 96, lines 3-7]. In addition, Foote teaches priority inheritance, in which when a thread waits on a mutex (i.e. first position) owned by a lower priority thread, the priority of the owner is increased to that of the waiter (i.e. defer the waiter) [Foote, col. 2, lines 53-66].

10. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined the teachings of Theimer, Bennett, and Foote because Foote's

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teachings allow the user with current exclusive access to have priority access to the device's capabilities.

11. As to claim 2, this claim is rejected for the same reason as claim 1 above.

12. As to claim 3, this claim is rejected for the same reason as claim 1 above.

13. As to claim 4, Theimer as modified teaches the invention substantially as claimed including in a case where the device determines in the determining step that the device is under exclusive control of another user, further comprising the device determining whether the user requesting exclusive control of the device has a higher priority than the other user and, if the requesting user does have a higher priority than the other user, the device temporarily yielding exclusive control of the device to the requesting user, thereby providing the requesting user with exclusive control of the device [Bennett, pg. 9, paragraph 92, lines 1-8; paragraph 97, lines 4-6].

14. As to claim 5, Theimer as modified teaches the invention substantially as claimed including wherein the determining step by the device comprises the device determining whether the user is authorized to obtain exclusive control of the device [col. 27, lines 3-5; 520, Fig. 19].

15. As to claim 6, this claim is rejected for the same reason as claim 1 above.

16. As to claim 7, this claim is rejected for the same reason as claims 1 and 6 above. In addition, Theimer as modified does not specifically teach notifying the user that exclusive control has been provided. However, Bennett disclosed processing notification messages from equipment to applications notifying the applications the status of the equipment [Bennett, paragraph 66, lines 1-11; paragraph 68, lines 12-15; Fig. 3B]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have recognize that the teaching of Bennett would include informing the user the availability of the device and the status of the user's (application's) request, in order for the user to perform/confirm its operations using the device's capabilities in a timely manner without delaying other users or taking up the capacity of the queue.

17. As to claims 8-9, these claims are rejected for the same reason as claim 7 above.

18. As to claims 10-12, these claims are rejected for the same reason as claims 1 and 8. In addition, Theimer as modified does not specifically teach moving the user to a new position within the reservation queue, wherein the new position is a last position within the reservation queue, and wherein the new position is based on the user's priority as compared with other user's in the reservation queue. However, it would have been obvious to one of an ordinary skill in the art at the time the invention was made, to lower the request's priority (given it the lowest priority) or resorting the requests in the queue base on its priority as been considered by Theimer as modified.

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19. As to claim 13, Theimer as modified does not teach wherein the device is a multifunction device and wherein the device's capabilities comprise printing, facsimile, scanning and copying. However, Theimer disclosed various computing devices that includes printer, copier, Tab, Board, etc. [col. 5, line 54; col. 14, lines 22-23; col. 26, lines 27-31]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have recognized that the computing devices of Theimer are not limited to the above examples and could include multifunction device with the capabilities of printing, facsimile, scanning and copying to extend the functionality of Theimer's method.

20. As to claim 14, this claim is rejected for the same reason as claim 5 above.

21. As to claim 61, this claim is rejected for the same reason as claim 1 above.

22. As to claims 16-29, these are computer-executable process claims that correspond to the method claims 1-14. Therefore, they are rejected for the same reason as claims 1-14 above.

23. As to claim 31, this is a computer-readable medium claim that corresponds to the method claim 1. Therefore, it is rejected for the same reason as claim 1 above.

24. As to claims 46-59, these are apparatus claims that correspond to the method claims 1-14. Therefore, they are rejected for the same reason as claims 1-14 above.

25. As to claim 63, this claim is rejected for the same reason as claim 61 above.

26. Claims 15, 30, 60, 62 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer, Bennett and Foote as applied to claims 1, 16, 31 and 46 above, in view of Davis et al (U.S. Patent 5,633,932).

27. Davis was cited in the last office action.

28. As to claim 15, this claim is rejected for the same reason as claims 1-2. In addition, Theimer as modified teaches substantially in a case where the user is provided with exclusive control of the device, further comprising the steps of:

the device obtaining identification information of the user [Theimer, col. 27, lines 3-7; 520, Fig. 19; Davis, col. 5, lines 35-38;]; and

29. However, Theimer, Bennett and Foote do not specifically teach based on the obtained identification information, the device automatically manipulating a print job within the job queue so as to print out the print job pending in the job queue for the user during a period in which the user maintains exclusive control of the device's capabilities, while temporarily deferring at least one print job pending in the job queue. Davis teaches upon receiving authentication through providing a PIN, release code, an authentication token or the like, the printing node decrypts the document and thereafter prints the document [Davis, col. 6, lines 41-48; 350, 355, 360, Fig. 3]. It would have been obvious to one of an ordinary skill in the art at the time the invention was

made, to have combined the teachings of Theimer, Bennett, Foote and Davis because Davis' teachings allow a secure processing of jobs submitted to be processed by the device's capabilities.

30. As to claim 30, this is a computer-readable medium claim that corresponds to the method claim 15. Therefore, it is rejected for the same reason as claim 15 above.

31. As to claim 60, this is an apparatus claim that corresponds to the method claim 15. Therefore, it is rejected for the same reason as claim 15 above.

32. As to claim 62, this claim is rejected for the same reason as claims 1 and 15 above. In addition, Theimer as modified does not specifically teach pushing a button on the device for relinquishing exclusive control of the device's capabilities. However, Bennett disclosed application releasing a resource from its exclusive use [Bennett, pg. 10, paragraph 96, lines 1-2] and Davis disclosed a user providing authentication near a printing node [Davis, col. 6, lines 38-41]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have recognized that the user intervention would complete the need of exclusive use of the resource and releasing the resource accordingly as being considered by Theimer as modified.

33. As to claim 64, this claim is rejected for the same reason as claim 62 above.

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34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,647,056 to Barrett et al, U.S. Patent No. 5,784,622 to Kalwitz et al teaches obtaining exclusive access to a peripheral and sending jobs to the peripheral.

Response to Arguments

35. Applicant's arguments filed 2/1/06 have been fully considered but are mooted in view of the new ground of rejection.

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qing-Yuan Wu whose telephone number is (571) 272-3776. The examiner can normally be reached on 8:30am-5:00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Qing-Yuan Wu

Examiner

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WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER